



# **USAMC INSTALLATIONS AND SERVICES ACTIVITY (AMC I&SA)**

# **FY 00 LESSONS LEARNED**

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MR. L. F. COLE, DIRECTOR







# USAMC INSTALLATIONS AND SERVICES ACTIVITY (AMC I&SA) FY 00 LESSONS LEARNED

#### INTRODUCTION

- 1. We prepare the AMC I&SA Lessons Learned annually as a service to our customers. It covers our three major functional areas of Facilities Engineering, Environment, and Installation Logistics, and provides a functional summary of major observations resulting from our construction program oversight, technical assistance visits, and from the following assistance/compliance reviews:
  - a. Facilities Engineering/Energy Programs Review (FE/EPR).
  - b. Fire and Emergency Services Operational Readiness Inspection (F&ESORI).
  - c. Food Service Program Management Review (FSPMR).
  - d. Environmental Compliance Assessment System (ECAS) Review.
  - e. Natural Resources Program Review (NRPR).
- f. Command Equipment Management Program Review/Equipment Survey Program (CEMPR/ESP).
  - g. Administrative Transport Management Survey (ATMS).
  - h. Command Supply Management Review (CSMR).
- 2. We provide Points of Contact (POCs) for each issue discussed so that you can obtain more information.
- 3. If you desire additional copies of this document, contact Ms. Swift, AMXIS, DSN 793-5536, or e-mail swiftj@ria.army.mil. You can also access the FY 00 Lessons Learned on our website at www.ria.armv.mil/isa/pubs1.htm.

# **FACILITIES ENGINEERING**

- 1. SUBJECT: Dielectric Testing Of Liquid-Filled Electric Equipment.
- a. ISSUE: Installations can minimize unexpected power outages and premature critical equipment failures by performing periodic dielectric tests on equipment.
- b. DISCUSSION: The power distribution systems at most Army installations consist of high voltage liquid-filled oil circuit breakers, oil switches, voltage regulators, auto reclosers, large transformers, etc. The oxygen in the air and moisture will cause formation of acids and sludge in the insulating liquid. Moisture in a very small amount can reduce the dielectric strength of the liquid below its acceptable value. Also, the working environment and carbon deposits due to arcing may lower the insulating characteristics of the liquid below a safe limit. Liquid-filled equipment with poor insulating characteristics result in unexpected power outages and premature equipment failure. So periodic dielectric tests on the insulating liquid ensure trouble-free operation of this equipment.
  - c. POC: P. Biswas/AMXIS-C/DSN 793-5832.
- SUBJECT: Accurate Technical Information On Power Distribution Systems.
- a. ISSUE: Army installations can improve utility operations and minimize maintenance and repair costs by keeping all technical documents on power distribution systems updated.
- b. DISCUSSION: Many installations do not maintain updated technical documents such as single-line diagrams, power system analysis, fault, protection coordination, and power factor correction studies concerning the power distribution systems. Many changes to existing high voltage systems are necessary to meet increasing power demand due to critical mission requirements. Most installations do not incorporate these changes into existing technical documents primarily due to reduced resources. However, accurate information on critical system components and updated drawings are essential to minimize trouble-shooting times and production losses. Also, such information is necessary to properly coordinate all over-current protection devices, ensure upgraded projects are appropriate, optimize power transfer during abnormal operations, and maximize transformer use.

- c. POC: P. Biswas/AMXIS-C/DSN 793-5832.
- 3. SUBJECT: Erosion on New Construction Projects.
- a. ISSUE: Some projects have major erosion problems developing during grading operations.
- b. DISCUSSION: When earth cuts are opened up and conversely large fills constructed, it is important to keep erosion control at the top of the priority list. All plans with earthwork involved need to have temporary and permanent erosion control measures. Temporary measures need to be taken before earthwork starts and also during grading when large areas susceptible to erosion remain prior to seeding and installation of permanent erosion control measures. Use of letdown riprap flumes, letdown corrugated metal pipe culverts, silt dikes to control runoff, silt fences, silt basins, and ditch checks, etc., are some erosion control devices. Untimely installation of these features can result in major erosion, especially if high slopes are involved. Project plans should call for benching both cut and fill slopes if their dimensions exceed the holding capacity of the soils present. Sandy materials will obviously cause more problems than cohesive clays. If the project plans do not include adequate measures, then modifications should be made as necessary and in a timely fashion to avoid devastating erosion from a major rainfall incident.
  - c. POC: C. Reindl/AMXIS-C/DSN 793-8264.
- 4. SUBJECT: Facility Reduction Program (FRP).
- a. ISSUE: Some of the critical FRP data fields in the real property data base contained invalid or missing information.
- b. DISCUSSION: AMC I&SA monitors the FRP program to analyze enduring installations' future requirements and demolished facilities for the current Fiscal Year (FY). Sites showed big improvement in their last Real Property Inventory (RPI) update reporting; however, we still found invalid and missing information (at quite a few Government-owned, contractor-operated sites and some Government-owned, Government-operated sites) for these critical fields in the Sep 99 RPI update.
- (a) The Year Disposal Planned (YDP) field contained 1995, 1996, 1997, and 1998 for facilities that were not demolished due to lack of funding. Sites need to look at these facilities and change the YDP to valid future years as determined by their FRP program.

- (b) The Estimated Cost to Demolish field was often left blank for facilities planned for disposal. This means that the sites were telling the U.S. Army Materiel Command (AMC) and the Department of the Army (DA) that they do not need any money to demolish the facilities. Sites could use a demolition cost of \$12.00 per Square Foot (SF) for contamination free facilities; otherwise, use a valid estimated cost. The Actual Cost to Demolish field was often left blank for facilities demolished. We need and use this information to arrive at AMC's average demolition cost per SF.
- (c) The Planned Disposition Code (PDC) field often had a blank or an invalid code (for example 'A', 'B', 'C', 'D', 'E'). Use of valid code ('G', 'H', 'J', 'W') is critical to obtain FRP credits for demolished facilities and to receive scarce FRP dollars allocated by DA for sites' requirements. Even though Operations and Maintenance, Army (OMA) installations receive FRP dollars, non-OMA enduring sites must use proper PDC codes to receive the credits.
- (d) The fields Project Fiscal Year, Project Number, Type of Funds Used (TFU) were sometimes left blank for demolished facilities. The TFU field tells us where the money is coming from while other fields are used for audit trail in case of an audit.
- (e) The date fields (HUD Date, Approval Date, Demolition Start Date, Demolition Completion Date (DCD), Date Drop the Record from Inventory (DDRI)) sometimes were left blank. The DCD, DDRI, and valid reportability code are critical for dropping the record from inventory once demolition of the facility is complete.
  - c. POC: N. Yerra/AMXIS-C/DSN 793-8290.
- 5. SUBJECT: Project Documentation (PD).
- a. ISSUE: Documentation in project folders for completed jobs was incomplete and located at various places within the directorate.

#### b. DISCUSSION:

(1) During Facilities Engineering/Energy Programs Review (FE/EPR) visits we found that project folders for completed jobs lacked minimum required PD. DA Pam 420-6, 15 May 97, Facilities Engineering DPW Resource Management System, DA Pam 420-11, 7 Oct 94, Project Definition and Work Classification, and AR 420-10, 15 Apr 97, Management of Installation Directorates of Public Works (DPW), provide guidance for PD. The guidance clearly requires that sites maintain a project folder for construction costs equal to \$15,000 or more and maintenance and repair costs equal to \$50,000 or more.

- (2) AR 420-10, paragraph 4-6, and DA Pam 420-11, paragraph 3-2, provide the list of minimum required documentation to be maintained in the folders. A random sample of project folders at several sites showed these folders lacking the minimum required documentation. However, often we found the missing documentation in several locations (with the project engineer, contracting office, etc.) within the DPW directorate. With so many personnel changes taking place throughout Army installations, it is getting harder retrieving information quickly. Keeping all required documentation in one project folder and locating the folder in one central location will save several hours of DPW personnel's time in case of an audit.
  - c. POC: N. Yerra/AMXIS-C/DSN 793-8290.
- 6. SUBJECT: Work Request Documentation.
- a. ISSUE: Cost estimates on DPW approved DA Form 4283, Request for Work, did not identify classification of work (K, L, etc.).

- (1) During our FE/EPR visits we found that DPW approved work requests did not show work classification of work performed. AR 420-10 identifies the DPW as the installation staff officer responsible for work classification and contains basic work classification policy and guidance.
- (2) Work classification definitions and rules apply to all facilities engineering work, regardless of who performs it and how it is funded. Misclassification of construction as maintenance or repair and errors in defining minor construction projects may result in statutory violation of the Anti-Deficiency Act. Anti-deficiency violations are serious and affect the Army's credibility. Department of Defense and DA policy calls for disciplinary action in anti-deficiency violation cases. So it is important that the DPW make sure the approved work requests contain work estimates with proper work classification before they approve them.
  - c. POC: N. Yerra/AMXIS-C/DSN 793-8290.
- 7. SUBJECT: Force Protection Plans, Engineering Input.
- a. ISSUE: As more AMC installations prepare Force Protection Plans, engineering organizations are sometimes being asked for their input.

- (1) This can range from reviewing provided text to being asked to compose an annex expressing how engineering responsibilities will be accomplished. There is little plan writing guidance for engineers. Of course, if your engineering organization hasn't been asked to contribute to the plan, then they need to take the initiative to become involved.
- (2) Three considerations are advised based on discussion with a number of engineers and Force Protection Officers. Use this strategy until definitive writing guidance becomes available.
- (a) Consider how engineering provides the third line of Force Protection defense after "intelligence" and "security" (focusing on anti-terrorism). Recognize that engineering responsibilities are largely concerned with delay and mitigation.
- 1 Note the vulnerabilities of key facilities (work with the Force Protection Officer) concentrating on those with large gatherings of people. This can either be a subjective approach or using the manual or automated TM-853 series approach.
- <u>2</u> Note all deficiencies remember that lists of security concerns may be classified.
  - 3 Generate projects to address the physical deficiencies.
- 4 Determine where the engineering organization may be called on to support or provide information to the other Force Protection Working Group members and where they provide support and information to the engineering organization.
- (b) Check your internal Standing Operating Procedures to see if they need modification to ensure systematic consideration of Force Protection responsibilities in maintenance, repair, construction, and rehabilitation projects.
- (c) Draft something and submit it. Include the above information. When other offices see the data flowing to and from the engineering organization and how it impacts them, they will provide comments to help further develop the plan.
  - c. POC: N. Shepherd/AMXIS-C/DSN 793-8368.
- 8. SUBJECT: Portable Boilers vs. Central Heating Plants.
- a. ISSUE: What do you do when you have a 50-year old central heating plant with miles of steam and condensate return lines that are all or in part in a state of disrepair.

#### b. DISCUSSION:

(1) This describes many AMC installations since large modernization projects often go unfunded while OMA maintenance and repair funds are being reduced as well. Portable boilers are available that are trailer mounted, self-contained, relatively inexpensive, and high efficiency, with low maintenance requirements. Note the case study below:

#### A CASE STUDY AT LONE STAR ARMY AMMUNITION PLANT (LSAAP).

The idea for using portable trailer mounted boilers came about in 1995. The main boilers were water tube H type, built in 1941 and 1942. The boilers were still in operating condition, but repair parts and equipment were becoming expensive and hard to locate and the operating efficiencies were down to 53 percent.

Another reason to use portable boilers was that the workload at LSAAP had been considerably reduced. Each main boiler plant supported various production lines. LSAAP did not want to upgrade or replace the main stationary boilers and controls because they were not sure which production lines would be required.

A 300 H.P. portable boiler now located at B-15 was acquired from Longhorn Army Ammunition Plant in Karnack, TX late in 1995. The unit consists of a boiler, water softener, electric feed pumps, feed water storage tank/pre-heater, and combustion controls placed inside a 43' dual axle trailer. It was located at B-15 boiler house to provide building heat for Area B. The B-line was selected for the mobile boiler because it was the biggest consumer of natural gas at LSAAP.

The mobile unit was connected to the existing distribution system adjacent to the building using flanged, flexible connections which would allow relocation of the unit in 24 hours or less if needed. In the past it took 8-12 hours to bring a main boiler on the line. The mobile unit, a firetube boiler, can be on the line in 4 hours.

During the first year of operation, a fuel savings of over \$17,000 was realized as well as considerably lower chemical treatment costs. A savings was also realized on system maintenance. The portable boiler can be cleaned in 2 days where the stationary boilers required a week to a week and a half each.

LSAAP received funding to purchase three additional portable boilers, one of which was delivered in Mar 00. The additional mobile units are of the same design as the one presently at B-15, but are 700 H.P. The new boilers will be located outside of Q-36, F-29, and G-29 boiler houses. The old boilers will be kept in stand-by status. The new boilers have fuel efficiencies of 83 percent using natural gas. LSAAP expects to see reduced fuel, chemical, and boiler maintenance costs at these locations once these units are installed and operating.

- (2) Portable boilers are also being used at U.S. Army Aberdeen Proving Ground, Tobyhanna Army Depot, and Hawthorne Army Depot.
  - c. POC: S. Podhurst/AMXIS-C/DSN 793-8295.

- 9. SUBJECT: Installation Status Report (ISR) Infrastructure.
- a. ISSUE: When quality ratings are entered into the ISR Infrastructure, the system self generates a cost for the sustainment of the facilities. It also generates a cost to improve the condition of the facilities to the next higher condition levels; e.g., from a C-3 to C-2 and C-1.
- b. DISCUSSION: When the user of a facility completes a Facility Condition Assessment form, inspection components are rated as Green, Amber, or Red. If one critical inspection component is rated Red, the whole facility is rated Red; e.g., a General Purpose Administrative Facility could be rated Red due to the toilets (a critical element) being rated Red. This will cause the ISR system to generate a cost to improve the building to an Amber and Green condition. This system-generated cost will be a lot higher than the cost to just fix the toilets. We have recommended to the HQDA Assistant Chief of Staff for Installation Management (ACSIM) that the Critical Element (\*\*\*) be removed from toilets for most facilities. If this recommendation is approved, it will have the dual benefit of raising your facilities condition rating and lowering your installation's improvement costs. When the new standards are issued for the FY 01 ISR, check to see if this recommendation is approved.
  - c. POC: S. Townsend/AMXIS-C/DSN 793-8367.
- 10. SUBJECT: Reporting Installation Status.
- a. ISSUE: Infrastructure Reporting Buildings were scheduled for demolition or no longer existed, but were still generating inspection sheets.

- (1) Facilities designated on the RPI as scheduled for demolition (RPI planned disposition code "G") were still generating ISR inspection sheets. Once a sheet is generated, safeguards in the ISR software required that a rating be entered for that facility. Failing to enter a rating prohibited the user from generating an export file. The only rating available for this situation was "Red." The result was a facility with no resource requirements generating the highest (i.e., Red) ISR resourcing requirement and fictitiously lowering the aggregate rating for that entire category of facility. This was subsequently reported to the Army's ISR proponent during the Army's Jul 00 After Action Review (AAR).
- (2) Facilities that had already been demolished were still generating ISR inspection sheets. Some of this condition was caused by delayed receipt of DA Forms

337 from the Corps of Engineers. Currently, AR 405-90, 10 May 85, Disposal of Real Estate, requires the completed DA Form 337 before the accountable (real) property office can post a "D" (e.g., demolished) reportability code on the RPI. The ISR software still requires modification to exclude "D" coded facilities and avoid future ISR reporting on nonexistent buildings. This issue was also raised to ACSIM during the AAR.

- (3) As of the date of this publication, ACSIM's POC for ISR, Mr. Tony Fasolo, reported that for FY 01 we are going to filter out records having not only Disposition Code G, but also B, H, and J all related to facility disposal.
  - c. POC: K. Krambeck/AMXIS-C/DSN 793-8291.
- 11. SUBJECT: Transformer Operation.
  - a. ISSUE: "Little load" or "no load" transformers waste energy.
- b. DISCUSSION: Transformers operating at or near rated capacities have optimum efficiency and result in significant cost savings due to reduced energy waste (transformer core loses). Many installations have large power distribution systems consisting of transformers of various sizes. Power consumption at most installations has decreased considerably due to reduced mission requirements and resulted in most of these transformers being either unnecessary or underutilized. When transformers supply "little load" or "no load" and remain energized, they waste energy via core losses (about 1-1.5 percent of the rated capacity). Installations should survey their power distribution systems and determine if loads can be combined into a single transformation point or totally disconnected. Remember, not only will this save the cost of energy in obtaining optimum efficiency from the transformers, but it will also reduce your BTU/SF ratio for energy consumption and help meet your energy reduction goals.
  - c. POC: T. Taylor/AMXIS-C/DSN 793-6656.
- 12. SUBJECT: Work Classification for Leased Facilities.
  - a. ISSUE: Renovating a leased facility How do you classify work?
  - b. DISCUSSION:
- (1) When you plan to renovate an existing administrative facility at your installation you may need to lease a facility during the interim period to accommodate the office space for your employees. This could involve construction, maintenance, and repair work for both the existing facility and the leased facility and require moving costs. If the total cost of construction/renovation exceeds \$500,000 for the existing

facility and the leased facility, can we award the project without violating the Anti-Deficiency Act?

- (2) Details follow on what constitutes project costs:
- (a) Leasing costs and moving costs including renovation of the leased facilities are part of the base operations cost; not a Real Property Maintenance Activities (RPMA) cost. These costs are not part of the funded cost.
- (b) We do not own leased buildings and do not classify work for non-Government buildings. It is a lease agreement/ lease approval issue; not a work classification/RPMA issue.
- (c) Even though there are common functions for both the existing administrative building and the leased building, the work classification deals with facilities not functions.
- (d) Existing building renovations are independent of renovations of the leased facility.
- (e) There will be no Anti-Deficiency Act violation as long as the total cost of construction/renovation of the existing administrative facility does not exceed the \$500,000 statutory limitation.
  - c. POC: R. Penmatcha/AMXIS-C/DSN 793-8296.
- 13. SUBJECT: Utility Systems Privatization.
- a. ISSUE: Managing the privatization process at the installation requires a team approach.

#### b. DISCUSSION:

(1) Utility privatization is, in the simplest of terms, procurement of a utility service contract while conveying the utility system to a utility entity. At the policy level this sounds simple, but at the implementation level (the installation) this action can become very complex requiring consistent/knowledgeable procurement, legal, engineering, environmental, contracting, and Corps of Engineers support. Army utility privatization actions are totally completed at the installation level where a team must be assembled to manage the process. The team must contain a representative from each

major directorate and will be coordinated by a single designated installation POC for utility privatization, normally from the DPW.

#### **REMEMBER - NO ONE GROUP OWNS THE PRIVATIZATION PROCESS**

- (2) It takes a team and a POC/coordinator to make the process work properly. The POC must coordinate the real property, legal, procurement, environmental, Corps of Engineers, and support contractor efforts to get all functions to the end point at the same time. The end point for the installation process is the Record of Decision to privatize or not. The installation team prepares this based on the economic analysis and recommendations prepared by the support contractor.
  - c. B. Hulbert/AMXIS-C/DSN 793-4871.
- 14. SUBJECT: Utility Systems Privatization.
- a. ISSUE: Recognize that Corps of Engineers support must begin early in the installation utility privatization process.
- b. DISCUSSION: The Corps of Engineers is the real property and real estate transfer agent for the Army. If the Privatization Action results in a decision to privatize the utility system, the Corps of Engineers prepares and signs the necessary documents. The AMC guidance has been to get the Corps of Engineers involved "at the beginning" of the process to ensure the necessary real property, real estate, and easement documents or "scopes" are contained with the procurement solicitation when issued. The intent is, if privatized, there is only one signing required by all parties.

NOTE: The Corps of Engineers effort with the necessary engineer and environmental support documentation is a 6 month (plus) timeframe. Begin early!

- c. B. Hulbert/AMXIS-C/DSN 793-4871.
- 15. SUBJECT: Implementation of Integrated Facilities System (IFS)/Defense Property Accountability System (DPAS) Interface for real property.
  - a. ISSUE: Status of implementation of IFS/DPAS real property interface.
- b. DISCUSSION: All AMC and U.S. Army Test and Evaluation Command installations successfully implemented the IFS/DPAS real property interface prior to preparation of the End-of-Year FY 00 financial statements. This was a time-consuming effort for all that participated and all of us involved with this initiative appreciate everyone's support, which allowed us to achieve 100 percent implementation.

- c. POC: K. Terrill/G. Troyer/AMXIS-C/DSN 793-5646/8297.
- 16. SUBJECT: End-of-Year FY 00 Certification of real property General Ledger Account Code (GLAC) Financial Information.
- a. ISSUE: Installation Real Property Officers (RPOs) were unsure of how to obtain real property GLAC total cost for the End-of-Year FY 00 financial statements.

#### b. DISCUSSION:

- (1) Installation RPOs produced End-of-Year GLAC financial information from IFS in previous years.
- (2) IFS eliminated the GLAC query/report with the implementation of IFS Interim Change Package (ICP) 12-01.
  - (3) All sites implemented IFS ICP 12-01 during 3d and 4th Qtr FY 00.
- (4) Real property GLAC totals are now available from the DPAS Capital Asset Trial Balance Report (DPTD031R). The real property GLAC totals are located on the last page.
- (5) AMC I&SA real property representatives are working with Army and DPAS representatives to incorporate additional real property financial reports in DPAS. This will enhance future real property GLAC reporting.
  - c. POC: K. Terrill/G. Troyer/AMXIS-C/DSN 793-5646/8297.
- 17. SUBJECT: Making Changes to Real Property Data After IFS ICP 12-01 is Loaded.
- a. ISSUE: Installations are unsure of how to enter disposal and capitalization changes into IFS after ICP 12-01 is implemented.

- (1) After IFS ICP 12-01 is loaded, negative capitalizations are no longer necessary.
- (2) Installations should no longer delete costs from IFS when documenting disposal of a facility. Installations may post a voucher with a description of the facility disposal. When entering disposal information into IFS ("D" RPF Reportability Code, date disposal completed, date dropped from inventory, and correct planned disposition

code), IFS will automatically send the facility to DPAS as a delete and DPAS will make the adjustment.

- (3) If installations discover the "Cost to Government" needs to be adjusted upward or downward, they should simply replace the cost in IFS with a description of what transpired (disposal or adjustment correction) and create a separate capitalization record with a new voucher number, description, and zero costs. Negative capitalizations should no longer be entered into IFS. New construction and capital improvements should be entered on a new Chief Financial Officer's Act (CFOA) record (using the CFOA Data/DD 1354 Screen) with appropriate information included if costs equal or exceed the current capitalization threshold (currently \$100,000). If the cost of construction or improvement is less than the current capitalization threshold, CFOA data required for interfacing with DPAS is not required.
  - c. POC: K. Terrill/G. Troyer/AMXIS-C/DSN 793-5646/8297.
- 18. SUBJECT: AMC Installations Interface IFS Client/Server (C/S) ICP 12-01 with DPAS.
- a. ISSUE: AMC installations must ensure that IFS ICP 12-01 real property records are correctly coded for proper DPAS reporting.
  - b. DISCUSSION: Some of the challenges that prevented data from interfacing are:
- (a) DPAS did not contain the proper Unit Identification Code (UIC). This produced an error message "UIC NOT ON TARGET DPAS DATABASE."
- (b) DPAS did not contain the proper DPAS Fund Code and Appropriation Allotment Serial Number for a UIC. This produced an error message of "FUND CODE/APPN ALOT SN NOT ON TARGET DPAS DATABASE."
- (c) Real property records on the IFS CFOA screen had improper Fund Source Codes and/or DPAS Posting Indicators. Records that contained a dollar amount in the Estimated Value were converted to a Fund Source Code of Non-Appropriated Funds (NAF). The Estimated Value dollar amounts may not be NAF. Also, NAF records contain a DPAS Posting Indicator of 'U'. Records with a DPAS Posting Indicator of 'U' indicate NAF funded improvements which are not subject to depreciation and will not be forwarded to DPAS. Improper coding of the Fund Source Code will cause an under reporting of dollar amounts in the Capital Asset Trial Balance Report.

- (d) Facilities, except land, which meet the Capitalization Threshold should have an Estimated Life on the CFOA Screen. The Estimated Life designates the number of years the facility or improvement is subject to depreciation. An error message of "ESTIMATED LIFE OF ASSET MANDATORY" is produced when the Estimated Life is missing. Army Working Capital Fund sites should please note that as of 1 Oct 00 the Estimated Life schedule is 40 years for new buildings; 20 years for new structures; 20 years for improvements to buildings; and 10 years for improvements to structures.
- (e) Land records on the CFOA screen should have an Asset Code of 'D' (Land) for Government-owned, NATO, or Other Ownership Codes. Land with Ownership Codes of Leased; Permit, Military; or Agreement were incorrectly converted to an Asset Code of 'H' (Leasehold improvement). This required installations to correct the Asset Code to 'D'. Stewardship land (defined as that acquired at no cost to the Government through treaty or donation (category codes 91120, 91131, 91141, 91210, or 91410)) should have a Heritage Asset Code of '7'. The Heritage Asset Code should be blank for all other land category codes.
- (f) IFS real property records where the Cost to Government was a negative dollar amount, and the Date of Capitalization was not aligned with the proper Capitalization record, caused the Capitalization record to convert to a negative dollar amount. This record would be interfaced with DPAS as a zero dollar amount and would cause an improper reporting of capital assets. Sites that have this situation should call this office.
  - c. POC: G. Troyer/K. Terrill/AMXIS-C/DSN 793-8297/5646.
- 19. SUBJECT: Subsistence Single Stock Fund.
  - a. ISSUE: Subsistence single stock fund conversion complete in AMC.
- b. DISCUSSION: The subsistence single stock fund conversion is complete within AMC. Implementation was successful at all installations. It is now fully implemented. All installations are satisfied with the seamless transactions.
  - c. POC: J. Taylor/AMXIS-C/DSN 793-8365.
- 20. SUBJECT: Headquarters Redesigned Army Defense Utility Energy Report System (DUERS) Data System (HQRADDS) Reporting.
- a. ISSUE: Input of HQRADDS energy consumption data is needed NLT 45 days after the end of the month to be reported.

- b. DISCUSSION: All of the energy officers in AMC realize energy consumption reporting is required by AR 11-27, Army Energy Program. However, AMC's timeliness in accomplishing the reporting is not as good as it should be. Currently, we pull a monthly report to see how we, as a Command, are doing in our reporting effort. Generally we are good, but there is always room for improvement. We receive a memorandum quarterly from the U.S. Army Logistics Integration Agency reminding us who is not current with their reporting. This Activity then forwards a reminder memorandum to those installations that are not current. This is an ongoing process, and we realize that for whatever reason we as a Command will not always be up to date, but we must do better. It is up to the installation to ensure they have their data organized and reported when it needs to be.
  - c. POC: R. Reeves/AMXIS-C/DSN 793-8292
- 21. SUBJECT: Energy Savings Performance Contracting (ESPC).
- a. ISSUE: Misconceptions regarding the intent, application, payback, contractors role, legalities, etc., of ESPCs have proven a significant barrier in soliciting installations participation in the program.
- b. DISCUSSION: Prior to FY 99 there was very little AMC participation in the ESPC program. A variety of misconceptions prevented installations from making the first move to bring the ESPC contractor aboard to do their initial energy assessment. These misconceptions ranged from the basic misunderstanding of what projects could be included in ESPC, how they were paid for, equipment ownership, maintenance and repair, and requirements for measurement and verification. In FY 99 AMC I&SA embarked on an aggressive program to educate our installations. AMC has participated in developing DA guidance on ESPCs, presented Command briefings at many of our installations, and requested and received funding from DA to support the program. AMC has also personally assisted in the development and execution of many of the installation agreements with U.S. Army Corps of Engineers Huntsville Support Center, Department of Energy, and General Services Administration through local utility companies. The success of this effort is evident. In FY 98, AMC had only 4 active ESPCs; while this year we have over 16 installations involved, some with multiple delivery orders.
  - c. POC: D. Faith/AMXIS-C/DSN 793-6485
- 22. SUBJECT: Playground Upgrade Program.
- a. ISSUE: The first full year of the playground upgrade program is quickly coming to an end, and installations participating in the FY 00 program should have been contacted by the contractors for preconstruction meetings. We have finalized the list of

FY 01 playground sites and coordinated with the Corps of Engineers representative. The new list and package of information will be sent from the AMC Deputy Chief of Staff for Installations to the installations identified for FY 01 playgrounds soon.

- (1) Here are some observations from this past year. People involved in a program which benefits children take a special pride in making sure the work is done quickly and correctly. Most commanders want their installations at the top of the list and the work done yesterday. When you visit an installation with a checkbook, they do treat you just a little differently than when you are an inspector. People who take the Certified Playground Inspector course and test all agree it's more difficult than they thought, and there's a lot more to playground safety than most people realize. When adults visit a playground they invariably reminisce about their favorite playground when they were growing up and wish they had a playground like the kids of today. However, they don't always realize the world has gotten smaller and playgrounds today have to compete with computers and TV for a child's attention. They may also still fear those really tall slides that they were "forced" to go down.
- (2) On a more serious note, this program was developed to remove the hazards of old playgrounds and play equipment not the risk. It is our mission to protect our children. No installation should relocate, reuse, or purchase and install new equipment without the approval (and under the supervision) of a Certified Playground Inspector ensuring that the equipment and installation meet the Consumer Product Safety Commission Guidelines and associated regulations. Finally, no old playground equipment should be removed without being destroyed. If deemed to be a hazard by a certified inspector -- not safe for the Army's use -- it's also not safe for a local church or school or any other location.
  - c. POC: M. Schroeder/AMXIS-C/DSN 793-8293.

# **ENVIRONMENT**

- 1. SUBJECT: U.S. Army Guide for Underground Storage Tank (UST) Management.
- a. ISSUE: With the passing of the 22 Dec 98 deadline for upgrades, U.S. Army Materiel Command (AMC) installations are shifting their focus to operation and maintenance.

- (1) Do not forget these very important dates:
- (a) Impressed current for tanks or piping inspect every 60 days.
- (b) Other cathodic protection systems test every 3 years.
- (c) Sacrificial anodes -- inspect every 6 months.
- (d) Internal lining of upgraded tank after 10 years, inspect every 5 years.
- (e) Interstitial monitoring monitor every 30 days.
- (f) Groundwater monitoring every 30 days.
- (g) Vapor monitoring every 30 days.
- (h) Gauging inventory every 30 days.
- (i) Product inventory -- monitor inputs, withdrawals and liquid levels daily; monitor bottom water monthly.
- (2) You must operate, maintain, calibrate, and document the new/upgraded spill and overfill protection devices, corrosion protection equipment, and leak detection devices according to specific guidelines developed by both the U.S. Environmental Protection Agency (EPA) and by individual States. To assist Army installations in complying with these regulations, the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM), in cooperation with the U.S. Army Environmental Center (USAEC), prepared a UST management guide. It incorporates Federal, State,

and Army procedures, policies, strategies, and guidance for achieving and maintaining regulatory compliance.

- (3) The guide begins with an overview of the current status of UST regulations and the Army's approach to compliance with these regulations. There are easy-to-read checklists of all requirements for use during an internal audit.
- (4) There's also a handy chart illustrating the time for certain monitoring and testing requirements. The Army recommendations are in italics, so it is easy to see the difference between the Musts and the Highly Recommended requirements. For example, you must test tank cathodic protection within 6 months of installation and every 3 years thereafter. However, the chart shows the Army recommends inspection of sacrificial anodes every 6 months.
- (5) You must chart monitoring requirements by daily, 30 day, 60 day, 3 month, 6 month, 1 year, 3 year, 5 year, and 10 year requirements. In this way, you can plan ahead to ensure funding for tests and monitoring is in place for the long term.
- (6) The guide is under finalization now. Please contact the POC below to get on the mailing list for when they become available.
  - c. POC: K. LaFrenz/AMXIS-U/DSN 793-8263.
- 2. SUBJECT: Dangers of Working With Wood Chippers Outlined in Research Institute Hazard Notice.
- a. ISSUE: Workers who use self-feeding wood chippers are at risk of being struck by the chipper disc hood or being fed through the chipper knives if they operate the machines improperly, according to a new Hazard ID by the National Institute for Occupational Safety and Health (NIOSH).

#### b. DISCUSSION:

(1) Several AMC installations are using wood chippers to help meet pollution prevention goals for solid waste reduction. We wanted to alert installations using the wood chippers of the recommendations to avoid injuries. The NIOSH reported 11 workers lost their lives from 1992-1997 while working near mobile wood chippers. The institute released the notice DHHS (NIOSH) Publication No. 99-145, Nov. 24. The NIOSH noted self-feeding mobile wood chippers are commonly used during tree trimming operations and consist of a feed mechanism, knives mounted on a rotating chipper disc or drum, and a power plant. The chipper disc or drum rotates between

- 1,000 and 2,000 rpm, and cuts and propels wood chips through the discharge spout. Tree branches and trunk sections are fed manually into the machines infeed hopper and are grabbed by the feed mechanism. Seven victims were caught by the feed mechanism and pulled through the chipper knives, according to NIOSH. Four other victims were struck by hoods that "separated from the machines after being improperly opened or closed while knives were still rotating," NIOSH said. The incidents were investigated as part of the NIOSH Fatality Assessment and Control Evaluation program, which identifies work situations at high risk for fatal injury and makes recommendations to avoid injury.
- (2) The NIOSH Recommendations. Among its recommendations for safely working around wood chippers, the institute said employers should:
- (a) Test and verify all safety devices and controls are functioning properly before using the chipper;
- (b) Train workers in safe work procedures including operating wood chipper safety devices and safety controls;
- (c) Ensure at least two workers are in close proximity when operating the chipper;
- (d) Ensure workers wear close-fitting clothing tucked in, gloves without cuffs, trousers without cuffs, and skid-resistant foot wear;
  - (e) Ensure workers' hands and feet remain outside the infeed hopper; and
  - (f) Train workers to feed brush and limbs into the infeed hopper butt-end first.
- (3) For additional information, NIOSH also encouraged employers and workers to consult ANSI Z133.1-1994, American National Standard for Tree Care Operations--Pruning, Trimming, Repairing, Maintaining, and Removing Trees and Cutting Brush--Safety Requirements.
  - c. POC: K. LaFrenz/AMXIS-U/DSN 793-8263.
- 3. SUBJECT: Variance from Preparation Requirements of an Installation Integrated Cultural Resources Management Plan (ICRMP).
- a. ISSUE: Installations may be eligible for a variance to not prepare an ICRMP which is a significant potential cost savings.

#### b. DISCUSSION:

- (1) IAW AR 200-4, paragraph 4-1 d, the installation commander may seek a Headquarters, Department of the Army (HQDA) variance from ICRMP preparation requirements when an installation has made comprehensive efforts to locate cultural resources and no cultural resources or very limited resources have been located.
- (2) To date, four AMC installations have been successful in obtaining approval of a variance from HQDA to not prepare an ICRMP. The AMC I&SA initiated this effort and assisted the installations in the preparation and staffing of the justification packages to obtain approval from HQDA for three of these installations.
- (3) During our Jul 00 Environmental Compliance Assessment System (ECAS) review conducted at the U.S. Army Soldier Systems Center (SSC), Natick, MA, we determined SSC would be a candidate for a variance. The AMC I&SA is currently staffing a request for a variance to HQDA on behalf of SSC. We anticipate HQDA will grant this variance leading to a cost savings of approximately \$50,000 for SSC.
- (4) If you think your installation would qualify for a variance for the preparation of your ICRMP or if you need assistance to help you decide, please contact Mr. Rick Sharp or Ms. Pat McCoy, AMXIS-U, DSN 793-6258/6658, e-mail: sharpr@ria.army.mil/mccoyt@ria.army.mil, respectively.
  - c. POC: R. Sharp/AMXIS-U/DSN 793-6258.
- 4. SUBJECT: Installation Status Report (ISR) Environment and Environmental Program Requirements (EPR).
- a. ISSUE: FY 99 EPR data imported into FY 00 ISR2 software caused ratings of C-2 or lower.

- (1) The EPR data imported into the FY 00 ISR2 software was from the Army's Fall 99 locked data base. We did not have the option to edit the ISR2 software data for the requirements field in the Must Fund Standards. In many cases, this caused the installations to have a Red or Amber rating for the Must Fund Standards lowering their Media rating to a C-2 or lower.
- (2) The main problem was installations had not updated their Fall EPR data to reflect accurate requirements versus obligations. If your obligations satisfy your

requirements (i.e., you obligated less than what your requirement was, but the project was completed), then you must adjust the EPR requirements and programmed field to indicate the true requirement. If, however the obligations were less than the requirements because you did not receive enough money to satisfy the requirement, then you should not adjust your EPR requirements and/or programmed fields.

- (3) It is imperative installations input accurate data into the environmental reporting data bases that feed ISR2 software. The ISR Program will soon be used to help build the Program Objective Memorandum (POM). The goal is FY 02.
  - c. POC: M. Moffitt/AMXIS-U/DSN 793-5040.
- 5. SUBJECT: Do You Have Universal Wastes?
- a. ISSUE: AMC installations have the opportunity to manage certain universal wastes under an alternative management standard rather than to manage under traditional hazardous waste procedures.

- (1) The EPA has added a new regulatory program to its hazardous waste regulations (60 Federal Register 25492). The EPA recognized regulations covering certain wastes are somewhat more restrictive than necessary. In 40 CFR 273, the Agency establishes regulations that provide an alternative management standard for what it describes as "universal wastes." According to the regulations, three types of wastes are considered universal wastes. They are:
- (a) Used batteries, not including spent lead-acid batteries regulated under 40 *CFR* 266, and batteries that are not hazardous wastes under 40 CFR 261.
- (b) Recalled pesticides, except those managed by farmers under 40 CFR 262.70, not considered a hazardous waste under 40 CFR 261, and pesticides that are not wastes as defined under 40 CFR 261.
- (c) Mercury-containing thermostats, except those not considered a hazardous waste under 40 CFR 261.
- (2) The EPA provides a set of definitions for each of these wastes and a list of exemptions. The worksheet below provides a summary of these definitions. If you answer "Yes" to any of the questions in the worksheet, then your wastes are universal wastes. All three types of materials become wastes on the first day they are discarded.

IS MY WASTE A UNIVERSAL WASTE?						
		Yes	No	N/A	Un- known	
1.	Do I generate spent or used batteries, disassemble batteries, or remove the electrolytes?					
1a.	Do I generate spent lead-acid batteries not covered under 40 CFR 266?					
1b.	Do my used batteries exhibit any of the hazardous waste characteristics found at 40 CFR 261, subpart C?					
1c.	Am I discarding the used batteries?					
	Do I manage pesticides that are recalled, suspended, cancelled, not in compliance with Federal Insecticide, Fungicide and Rodenticide Act and recalled voluntarily and not managed under 40 CFR 262.70?					
2a.	Do I manage recalled pesticides that are not covered under 40 CFR 260 through 272?					
2b.	Do I have other pesticides that are being managed as a part of a waste pesticide program and not subject to 40 CFR 260 through 272?					
2c.	Have I agreed to participate in a pesticide recall program?					
2d.	Have I recalled pesticides and decided to discard them?					
3.	Do I manage used mercury-containing thermostats that are wastes per 40 CFR 261?					
3a.	Do I generate thermostats that are considered hazardous wastes under 40 CFR 261, subpart C?					
3b.	Do I discard used thermostats?					

#### (3) Handlers

- (a) A handler is a facility that accumulates universal wastes and is a generator of universal wastes, or a facility that receives universal waste from other universal waste handlers, accumulates universal waste and sends universal waste to another universal waste handler or a destination facility. A destination facility is a facility that treats, disposes of, or recycles universal waste. A handler cannot be a destination facility. A transporter transports universal waste by air, rail, highway, or water.
- (b) The regulations establish two classes of handlers: small-quantity and large-quantity. Small-Quantity Handlers (SQHs) accumulate up to 5,000 kilograms of covered wastes, while Large-Quantity Handlers (LQHs) accumulate more than 5,000 kilograms.
- (c) An SQH is prohibited from disposing of, diluting, or treating a universal waste. The SQH does not have to notify EPA of its universal waste activities. The SQH may perform the following battery-related activities:
  - Sort batteries.

- Mix battery types.
- Discharge batteries to remove the electrical charge.
- Regenerate used batteries.
- Disassemble batteries or battery packs into individual batteries or cells.
- Remove batteries from consumer products.
- Remove electrolytes from batteries.
- (d) For all universal wastes, the SQH must ensure there are no releases from storage containers holding the wastes. You may store pesticides in tanks regulated under 40 CFR 265, Subpart J. The SQH may remove the mercury ampules from thermostats provided:
  - There are no broken ampules.
  - Each ampule is opened over a containment device.
  - A mercury cleanup system is nearby.
- Any leaking mercury is transferred into a container that meets 40 *CFR* 262.34 regulations.
  - The area is well ventilated.
  - Employees are familiar with emergency procedures.
  - The removed ampules are stored in a closed, non-leaking container.
- Additional packing materials are packed around the ampules to prevent breakage.
  - Mercury residues are treated according to 40 CFR 261.
- (e) The SQH must properly label all containers storing universal wastes as "universal wastes" or "waste." The label must be legible, and if storing pesticides, the label that accompanied the pesticide also must be attached. Universal waste storage

may not exceed 1 year from the time when the first quantity of universal waste is added to the container. The SQH must be able to demonstrate the time by one of the following methods:

- Labeling the first date of wastes on the container.
- Dating each individual item placed in the container.
- Maintaining an inventory system that identifies the date the waste was accumulated.
- Placing the waste in a specific accumulation area and identifying the length of time the accumulation has been conducted.
  - Any other method that clearly establishes timeframes.
- (f) All SQH personnel who handle universal wastes must be properly trained in emergency procedures, must respond to releases, must take the universal waste to a universal waste facility, and must properly mark the waste per U.S. Department of Transportation (DOT) regulations. The SQH is not required to keep waste shipment records.
- (g) An LQH must notify EPA of its activities, unless it already has an EPA Resource Conservation and Recovery Act (RCRA) identification number. This notification must include the name and address of the LQH, a list of the types of universal wastes managed and a statement that the 5000-kilogram limit will be exceeded. An LQH can accumulate universal wastes longer than 1 year, but must be able to show the actual accumulation time. In general, the LQH has the same handling, storage, accumulation, labeling, release response, and training requirements as the SQH. In addition, the LQH must keep a record of each universal waste shipment it receives and a record of each shipment. The record may be a log, an invoice, a manifest, a bill of lading, or another shipping document. The LQH must retain these records for at least 3 years from the date of receipt of shipment or the date the shipment left the LQH facility.
- (h) Universal waste transporters may not dispose of, dilute, or treat the waste. The transporter must comply with all DOT regulations outlined in 49 *CFR* 171-180, may not store the wastes more than 10 days, must be able to respond to any release of universal wastes, and cannot transport universal waste to any non-universal waste facility.

- (i) A universal waste Destination Facility (DF) is a facility that treats, disposes of, or recycles universal wastes. The DFs must comply with 40 *CFR* 264-270. The DF cannot store universal wastes as a part of recycling the wastes without complying with 40 *CFR* 261.6(c)(2).
- (j) The DF cannot send or take any universal waste to a non-universal waste facility, and may reject any shipments. It may send them back either to the shipper or to another DF, if both parties agree. If the waste is a hazardous waste and not a universal waste, the DF must notify EPA of the illegal shipment. The DF must keep a record of all shipments it received and retain the record for 3 years after receipt. The accepted records are the same as those listed above for an LQH. An importer of universal wastes must comply with the appropriate handler, transporter, and DF regulations. The EPA anticipates adding other universal wastes and has established a petition program to add new wastes.
  - c. POC: B. Wyatt/AMXIS-U/DSN 793-8269.
- 6. SUBJECT: ISR Environment, Total Revamp Scheduled for FY 02.
- a. ISSUE: The ISR Environment does not provide the information the Assistant Chief of Staff for Installation Management (ACSIM) needs to effectively manage the environmental program and resources.

- (1) ISR Infrastructure and ISR Services have the ability to not only rate the facilities and services provided, but also determine the sustainment and improvement costs for these areas. However, ISR Environment currently does not provide the same data.
- (2) We have our EPRs, Environmental Quality Report (EQR), and Defense Sites Environmental Restoration Tracking System (DSERTS) programs to show us what we are doing in the environmental program, and where we are spending our money (for AMC any type of money can pay for environmental projects), and what money we need to stay in compliance, meet Department of Defense (DOD) objectives, etc. However, DA has concerns the ISR Environment does not effectively portray what it costs to sustain our environmental programs, nor what it takes to improve our environmental programs beyond the first 2-3 years of the POM.
- (3) ACSIM's goal is to use the ISR Program (all three parts) to help build the POM starting in FY 02. ACSIM's POM is only Operations and Maintenance, Army

(OMA) dollars, and captures only Must Fund requirements (necessary sustainment and legally mandated requirements). The AMC uses more than just OMA dollars to fund environmental projects. The challenge begins!

- (4) Our current challenge is to revamp ISR Environment to look, feel, and smell like ISR Infrastructure and Services. In order to do that, the following initiatives are in progress as the ink dries on this article:
- (a) A Predictive Cost Model is being developed to show sustainment costs, and improvement costs (what will it take to get from a C-4 to a C-1).
- (b) The standards are being rewritten to address long-term objectives, short-term objectives, etc.
  - (c) The ISR2 software will be a WEB application, goal is set for FY 02.
- (5) The FY 01 submission will be basically the same as FY 00. Improvements were made to fix the funding ceiling algorithms, and other minor problems noted during the FY 00 submission. No major changes will be made to the software or standards for the FY 01 submission.
  - c. POC: M. Moffitt/AMXIS-U/DSN 793-5040.
- 7. SUBJECT: Drinking Water -- Incomplete Quality Monitoring.
- a. ISSUE: Installations should not be dependent upon their contract or state laboratory to send them the necessary sample bottles when monitoring is due.

- (1) During FY 00 installation ECAS visits, the drinking water reviewer noted incomplete monitoring on several occasions. In most instances it was a result of the installation not performing all of the state required monitoring because the laboratory they used neglected to send them the sample bottles, or the samples were lost or broken en route. In one case, the shipping firm lost the sample bottles en route to the lab and the installation assumed the state lab had performed the test and forwarded the results to the proper state office. After the sampling period ended, the state notified the installation of their failure to monitor.
- (2) It is the water supplier's responsibility to perform all of the state required monitoring according to regulations, even if they no not receive their sample

bottles. In other words, it is the responsibility of the water provider for timely completion of all monitoring. This includes making sure the results of all monitoring arrive at the designated state office. Some states provide the water supplier with monitoring schedules but others do not. It is the responsibility of the water provider to know when state required monitoring is due. A tool to help manage this is a monitoring plan. A poster titled <a href="mailto:sDWA Update">SDWA Update</a> available for \$5 from the California State University, Sacramento, phone: (916) 278-6142, e-mail: <a href="mailto:wateroffice@csus.edu">wateroffice@csus.edu</a> lists the current Safe Drinking Water Act (SDWA) monitoring requirements for various water systems, including future new monitoring requirements. This poster is helpful to determine what requirements need to be in your plan. Each individual state may have more stringent requirements, so ask the state water office to review a draft version of your plan before finalizing. Once you have a monitoring plan in place, it is a good idea to update it annually as changes to water systems, mission, and monitoring requirements regularly occur.

- c. POC: J. Waring/AMXIS-U/DSN 793-8366.
- 8. SUBJECT: EPR Exhibits.
- a. ISSUE: Accurate and defendable EPR exhibits document environmental requirements and provide justification for the environmental resources.

- (1) Many installations are doing a good job identifying and documenting environmental requirements in the EPR. As a result of conducting quality assurance/quality control reviews, here are some suggestions for producing even better EPR submissions:
- (a) Projects should exhibit the criteria for an "environmental" project. Routine maintenance and operations are normally not environmental projects.
- (b) Narratives should include the legal mandate (law/regulation) to support Class 1 and Class 2 findings.
- (c) Narratives should contain quantitative scope information and adequate details to support costs and any significant cost differences or changes in annual requirements.
- (d) Class 0 projects are normally recurring. If you can "buy out" the environmental requirement, it is most likely not Class 0.

- (e) Pollution prevention projects involving equipment purchases, recycling, or correcting noncompliance to meet new standards require cost and benefit data in the EPR exhibit.
- (f) The law/regulation field should be consistent with the description in the project narrative.
- (g) The narrative should properly support the project's "Must Fund" status consistent with the Compliance Status and Project Assessment fields.
- (2) If you're having problems writing narratives or estimating costs for EPR exhibits, try using The U.S. Army Environmental Program Requirements Project Catalog 2000 available on DENIX. This catalog has many excellent examples and supporting information to help prepare and justify your environmental requirements.
  - c. POC: G. Badtram/AMXIS-U/DSN 793-8268.
- 9. SUBJECT: Retrospective Root Cause Analysis of ECAS Findings.
- a. ISSUE: A DOD Inspector General report determined the ECAS program lacked an effective root cause analysis model. They hypothesized that environmental managers can minimize recurring and systemic problems (as evidenced by repeat findings) by identifying and correcting the root cause of the problem.

- (1) USACHPPM, with assistance from AMC I&SA, completed a retrospective root cause analysis of approximately 1700 army wide Class I and II findings identified by ECAS reviews during FY 97-99. The root causes were assigned using an Environmental Management System (EMS) based root cause model developed from ISO 14001 standards. Recognizing there are many limitations on conducting a retrospective analysis of ECAS data, some of the major conclusions were:
- (a) The majority of the root cause for Class I and II ECAS assessment findings related to "Implementation and Operation" deficiencies. Root causes associated with "Planning" and "Checking and Corrective Action" issues accounted for most of the rest.
- (b) The EMS-based root cause codes assigned for many of the wastewater and water quality compliance deficiencies were "facilities related".

- (c) The primary EMS-based root cause for hazardous waste compliance deficiencies tended to be "training related," linked to the effectiveness of installation-level hazardous waste training.
- (d) The EMS-based root causes for solid waste and Petroleum, Oil and Lubricant management were either "planning related" or "procedures related".
- (e) The EMS-based root cause for air emissions was "Attention to Detail," due to the increasing complexity of new air emission regulations and permits.
- (f) Considerable EMS-based root cause variability existed between Major Army Commands (MACOMs) for the various "high risk" program areas, tending to reinforce the need for MACOM-specific corrective strategies.
- (2) If you're interested in the complete report of this analysis, let us know and we'll e-mail you a copy. Even though the process is very subjective, we identify and document a root cause for each of the ECAS findings to aid in any future root cause analysis. The new ECAS software, currently under development, will facilitate the collection of root cause information and the ECAS software training will likely include a session relating to root causes. Next time you become aware of an environmental noncompliance issue, consider the root cause and what your installation can do to correct the root cause, as well as the noncompliance.
  - c. POC: G. Badtram/AMXIS-U/DSN 793-8268.

# **INSTALLATION LOGISTICS**

- 1. SUBJECT: Quarterly Reconciliation.
- a. ISSUE: Some Army Working Capital Fund (AWCF) installations are not performing a quarterly reconciliation of the General Ledger Account (GLAC) with the Defense Property Accountability System (DPAS).

- (1) As a result of a U.S. Army Audit Agency (AAA) audit report of AWCF installations, one of the observations states, "Army activities did not perform proper reconciliation between subsidiary records and general ledger balances for equipment. In addition, Army activities did not retain documentation to support the value. Army activities needed to improve their internal controls for property, plant, and equipment to provide reasonable assurance that reliable information was presented in the financial statements."
- (2) The objective of the reconciliation is to determine if the Standard Industrial Funds System (SIFS) and DPAS are in "balance" and if not, get them in "balance." The basic principle is to compare the balances in the GLACs and DPAS and adjust the records accordingly. You must work closely with your Resource Management office because they are the focal point for daily comparisons and validations of DPAS and SIFS reports.
- (3) AWCF installations received a memorandum signed by MG Charles S. Mahan, Jr., Chief of Staff, U.S. Army Materiel Command (AMC), stating that all AWCF installations must perform a quarterly reconciliation of DPAS with GLACs. The installation Commander must forward his signed statement certifying completion of this action to AMC I&SA, ATTN: AMXIS-L. This will continue until further notice.
  - c. POC: P. Grobe/AMXIS-L/DSN 793-3482.
- 2. SUBJECT: Property Book (PB) Reconciliation.
- a. ISSUE: Installations are not reconciling authorization documents with PB authorized allowances.

- b. DISCUSSION: An annual reconciliation between the PB and applicable authorization documents is mandatory. This includes all authorization documents, not just those contained in the Tables of Distribution and Allowances (TDA). The Property Book Officer (PBO) must sign a statement attesting to the annual reconciliation IAW AMC Supplement 1 to AR 710-2, 24 Aug 95, Supply Policy Below the Wholesale Level. The PBO will forward this statement to the Commander or designated representative to acknowledge the reconciliation in writing and file it with the statement of responsibility. It is extremely important to reconcile the TDA with the PB to ensure documentation of only the minimum equipment, that equipment needed to accomplish the mission is on hand or on order, and to assure the correct authorization of equipment.
  - c. POC: N. St. Clair/AMXIS-L/DSN 793-6334.
- 3. SUBJECT: Standing Operating Procedures (SOPs).
  - a. ISSUE: SOPs at some installations require improvement.
- b. DISCUSSION: We recommend SOPs more today than ever as insurance against loss or reassignment of knowledgeable support personnel and to provide continuity of operations. Your SOPs should contain detailed instructions and be written so that anyone could perform the function. Be sure to prepare SOPs for all the functions you perform in the equipment management arena.
  - c. POC: C. Winston/AMXIS-L/DSN 793-8362.
- 4. SUBJECT: Calibration of Test, Measurement, and Diagnostic Equipment (TMDE).
  - a. ISSUE: Calibration delinquency rates for TMDE are on the rise.
- b. DISCUSSION: The calibration delinquency rate indicates the percentage of equipment requiring calibration registered in the TMDE Integrated Materiel Management System (TIMMS) that is past due for calibration. The TMDE that is not calibrated can impact successful accomplishment of an organization's mission in the area of quality control. This is important to research and development activities and organizations engaged in manufacturing processes. Coordinating, scheduling, and delivering items for calibration is a reasonably intensive task. Its complexity will increase with the closing of 13 TMDE centers by the U.S. Army TMDE Activity in FY 01. Alternatives are available to reduce the amount of equipment scheduled for calibration. Establish a "calibrate before use" policy and allow the placement of TMDE in administrative storage. Identify items for "F" level calibration where the hand receipt

holder can calibrate the item. It always helps to identify TMDE during equipment management walk-through reviews that is not registered in TIMMS.

- c. POC: M. Morris/AMXIS-L/DSN 793-8301.
- 5. SUBJECT: Loan/Lease (LO/LE) Code in DPAS.
- a. ISSUE: Some installations are not entering the correct LO/LE code or are confused as to which code to use.
  - b. DISCUSSION: Listed below are the LO/LE codes you should use:

LO/LE Codes				
BLANK	Government owned.			
С	Government Furnished Equipment (GFE) provided to a contractor IAW the Federal Acquisition Regulation.			
G	Long term lease of other than vehicular equipment. (Real Estate, Information Technology, Furniture, etc).			
L	On loan from another Government activity or agency such as another installation or National Inventory Control Point (NICP).			
M	On loan to another Government activity or agency such as another installation or NICP.			
N	From customer owned assets of a tenant, contractor, or visiting customer activity.			
Р	Long term, nontactical vehicle lease from the General Services Administration (GSA) under a service or agency memoranda of agreement.			
R	Rented or leased from a commercial source other than GSA.			
S	Equipment placed in a "lay-away", Plant Equipment Package, mobilization stock or "underutilized plant capacity" status. Not normally a loan or lease. This code is an aid in identifying equipment in this status for local asset management purposes.			
Т	A short term lease of normally motorized or other equipment from GSA not to exceed a year.			

- c. POC: P. Grobe/AMXIS-L/DSN 793-3482.
- 6. SUBJECT: Depreciation of Capital Assets.
- a. ISSUE: Some General Fund installations and activities are not calculating depreciation of capital assets with DPAS.

- b. DISCUSSION: General Fund activities are not entering the data in DPAS to properly calculate and report depreciation. When cataloging property, items with an acquisition cost of \$100K and above must be classified as General, National Defense, or Heritage assets with the Type Asset Code. The Asset Control and Equipment Depreciation Codes must accurately describe the property. The Type Fund Indicator Code must be set to "0". Hand receipt records must reflect "funded" depreciation for all assets and the asset codes must be compatible with the Type Asset Code and Asset Control Code. The PBOs tend to overlook entering the activation date, depreciation period, depreciation office, and Depreciation Task Code in the accounting process. General Fund activities have neglected to establish fixed asset files to validate acquisition cost for auditors.
  - c. POC: M. Morris/AMXIS-L/DSN 793-8301.
- 7. SUBJECT: DA Form 2408-9, Equipment Control Record.
  - a. ISSUE: Installations are not submitting DA Forms 2408-9 in a timely manner.
- b. DISCUSSION: You **must** forward your DA Form 2408-9 within 10 working days to AMC I&SA, ATTN: AMXIS-L, following acceptance, transfer, gain, national stock number redesignation, or loss of reportable equipment, IAW AR 710-3, 31 Mar 97, Asset Transaction System, and AMC Supplement 1 to AR 710-3, 20 Apr 94. To expedite this procedure, complete the DA Form 2408-9 found under Installation Logistics on our home page at **www.ria.army.mil/isa/**, and send it to us electronically. It is imperative that we receive your DA Forms 2408-9 within the required timeframe. We maintain an inventory of all mobile equipment within AMC and use this inventory to plan, coordinate, redistribute serviceable assets, and program replacements between the Major Army Command (MACOM) and the NICP.
  - c. POC: L. Emerick/AMXIS-L/DSN 793-8322.
- 8. SUBJECT: Air and Gas Compressors.
  - a. ISSUE: The testing and marking of compressors require improvement.
- b. DISCUSSION: You must inspect and mark your compressors on a yearly basis IAW TB 43-0151, 17 Mar 89, Inspection and Test of Air and Other Gas Compressors. We find inspection of the compressors is past due, some safety valves do not have seals, and some compressors do not have inspection tags. After testing or inspecting the equipment, affix a tag or stencil the compressor with the date inspected and the

next inspection due date. Establish procedures that ensure periodic inspections and tests of air and gas compressors.

- c. POC: D. Fuglsang/AMXIS-L/DSN 793-8361.
- 9. SUBJECT: Inspection of Hooks and Slings.
  - a. ISSUE: The inspection of hooks and slings requires improvement.
- b. DISCUSSION: Installations have the responsibility of inspecting, maintaining, scheduling, and documenting the inspection of hooks and slings IAW TB 43-0142, 28 Feb 97, Safety Inspection and Testing of Lifting Devices. Visual inspection of slings and all fastenings and attachments shall be conducted daily or before use. Within AMC, hooks on jib cranes and hoists 1,000 pounds or less will have a visual periodic inspection by maintenance personnel. You may supplement the visual inspection with a magnetic particle or other nondestructive type testing whenever conditions indicate the need for more in-depth inspections. This inspection applies to all lift hooks, chain hoists, chains, slings, and cables, not just crane hooks. You must schedule and document the annual inspection of lifting slings. Use DPAS to schedule annual inspections and serve as a reference for historical data. It is common to find no sling master list, improperly stored and marked slings, and no local identification number. Hang the slings so they are readily available to the user and assign a number to the slings for easier identification, control, and for scheduling inspections.
  - c. POC: C. Mecham/AMXIS-L/DSN 793-8321.
- 10. SUBJECT: Command Supply Discipline Program (CSDP).
- a. ISSUE: Some CSDP monitors do not follow up on supply deficiencies or provide status to the Commander.

- (1) The CSDP provides the Commander information regarding accomplishment of regulatory responsibilities. The Commander must implement the CSDP and appoint, in writing, a senior logistician as the monitor, IAW AR 735-5, 28 Feb 99, Policies and Procedures for Property Accountability. Paragraph B-8 of AR 735-5, establishes evaluation requirements, frequency, and procedures.
- (2) The intent of the CSDP is to standardize supply discipline throughout the Army and to simplify command, supervisory, and managerial responsibilities. We

accomplish this by outlining the various requirements for responsible personnel, by standardizing requirements, and by formalizing evaluation and follow-up procedures. The intended result of these evaluations is to factually present to your Commander what supply problems exist so the chain of command can initiate prompt corrective action. We cannot overemphasize the importance of using the results of the evaluation process as a management tool.

- c. POC: B. Kilpatrick/AMXIS-L/DSN 793-8317.
- 11. SUBJECT: File Accuracy Between Systems.
- a. ISSUE: Installation staffs did not always reconcile supply transactions with other installation systems.

#### b. DISCUSSION:

- (1) We find there is an urgent need to emphasize the timeliness and accuracy of logistics, contracting, and financial transactions. The increasing complexity of logistics processes makes it far more difficult to detect and correct errors. Timely detection and correction of errors become more important as we streamline our business processes. The supply support activity must take aggressive steps to improve the accuracy of transactions and detect and correct errors as early as possible.
- (2) It is essential to routinely perform the required files maintenance and reconciliation among logistics, contracting, and finance. Our standard AMC systems provide the management reports to help with this reconciliation. With smaller staffs, we must ensure timely correction of errors. All areas responsible for customer support, whether it is acquiring/issuing supplies or keeping track of their dollars, must work closely to resolve discrepancies and be mission responsive.
  - c. POC: R. Monn/AMXIS-L/DSN 793-6879.
- 12. SUBJECT: Standby Supplies and Customer-Owned Inventory.
- a. ISSUE: Users of standby supplies and customer-owned inventory did not always review and validate lists of stocks periodically.

#### b. DISCUSSION:

(1) Standby supplies include non-demand supported essential items on the Authorized Stockage List (ASL) as stocked insurance items for which you do not expect

replacement as a result of normal use, when there is an unacceptable lead time, or for any future emergencies. Normally, customers specify stockage quantities for standby items. To prevent unwarranted investments for stockage, we recommend a semiannual review of these items and subsequent approval for standby supplies by the installation commander. The Stock Record Officer (SRO) can add or delete items from the ASL when the Commander approves the standby list with the desired changes annotated.

- (2) The customer-owned inventory provides a technique to administratively identify, separate, and control stocks owned and purchased by customers of the Stock Record Account (SRA) for ongoing or future approved projects: e.g., maintenance, research and development, and manufacturing. Although the SRA maintains the accountable record, this materiel will not be part of the ASL or have demand stockage levels established solely for the customer-owned inventory. Authorized retention applies only to those stocks positively identified to approved projects scheduled to begin within a 2 year period. Quantities purchased will not exceed 2 years anticipated requirements and if possible keep quantities to a 1 year need. Customer approval at the directorate, separate TDA activity chief, or equivalent level is necessary before accepting supplies as customer owned inventory. The director/activity chief may not delegate this approval. A semiannual review for retention will include determination that the project will consume the inventory in no more than 2 years. Any materiel not meeting the criteria will require redistribution or reporting as excess.
- (3) The SRO should maintain a record of each review of the standby and customer owned items. The requirements to periodically review stockage levels and justify retention of non-demand supported materiel are management controls which protect Army assets from waste, fraud, and abuse. The lack of controls described above relate to one or more of the seven logistics material weaknesses on which the Army is continuing corrective action.
  - c. POC: R. Monn/AMXIS-L/DSN 793-6879.
- 13. SUBJECT: Excess Ammunition and Explosives Identified on Formal Accountable Records.
- a. ISSUE: There were no procedures in place to identify excess positions based on demands.
  - b. DISCUSSION:
- (1) Paragraph 3-38, AR 710-2, 31 Oct 97, Inventory Management Supply Policy Below the Wholesale Level, states "Class 5 (ammunition) will be monitored for excess stockage and possible redistribution of that excess stockage. Class 5 items that are

excess to the needs or authorization of the owning activity (unit) will be reported as excess for turn-in."

- (2) Our review of stocked ammunition accounted for on property books and Mission Stock Record Accounts (MSRA) revealed that demands did not justify retention of stockage levels maintained. We found other than scheduled inventories, the date of last activity was in excess of five or ten years. Maintaining levels of stockage that have no mission requirements only results in expenditure of administrative resources that are needlessly spent on inventory requirements.
- (3) The amount and type of ammunition/explosive stockage levels at the MSRA are the equivalent of a normal ASL. Items stored as part of an ASL require an annual review and subsequent approval by the commander. This review process was not apparent at most sites. Customer owned stock should not be exempt from this review process, especially if the stock is documented on your DA Form 3020-R, Magazine Data Card, as having no activity. The PB accountability for ammunition/explosives should only reflect operational loads necessary for normal mission requirements. The only exception would be the allowable retention for current, or near future needs for research, development, test and evaluation mission requirements. Keeping items with no known mission requirement in inventory causes unnecessary expenditures of administrative resources.
  - c. POC: D. Emerick/AMXIS-L/DSN 793-8316.